THE MARINE RECORD.

DEVOTED TO COMMERCE, ENGINEERING AND SCIENCE.

VOL. X NO. 6. CLEVELAND, O., FEBRUARY 9, 1888. $2.00 PER ANNUM. SINGLE COPIES 5 CENTS.

Det. Bel Isle & Windsor Ferry Co 87

AROUND THE LAKES.

CLEVELAND.

The steamship Cormorant is receiving new keelsons and decks.

Mr. Tarbox, treasurer of the Penfield Block Co., was in the city this week.

The steamship Egyptian is to have two new fire box boilers which are being built at Erie, Pa.

Captain Robinson, of Lorain, has purchased the schooner Red, White and Blue, 425 tons.

At the Cleveland Drydock Co.'s steamship building for H. J. Johnson and others, is well advanced.

M. A. Bradley and wife left this city for a trip to New Orleans, Jacksonville, and St. Augustine, and will be gone about three weeks.

At the recent meeting of the dry dock association, Mr. W. I. Babcock of Buffalo, was elected president, and H. J. Mills secretary and treasurer.

The steamship Argonaut will also go into drydock and receive steel arches, ceiling between decks, refastening and a thorough overhauling.

B. Whittaker, vessel broker of Detroit, was in this city Wednesday, and he and his wife left on a pleasure trip to California Wednesday evening.

B. Whittaker and others, of Detroit, have purchased the schooner David Stewart from James McKenzie and the estate of D. Rodgers, Buffalo; consideration, $16,000.

Messrs. Bassett, Presley & Train, iron merchants, are furnishing steel arches for the Argonaut and William Edwards, being repaired by the Cleveland Dryd ck Co.

The Egyptian is getting new boilers with capacity of 125 pounds of steam, and the Cormorant new decks, new floors and keelsons. The Wocoken is getting repairs made to her machinery.

The barge Specular will go into drydock and receive an engine boiler rooms and cabins and be converted into a steamship. The Globe Iron Works will supply the machinery.

Mr. Frank Manton, agent of the American Ship Windlass Co., of Providence, R. I., was in the city yesterday. Mr. Manton has gone up to West Bay City, but will return here on Friday.

Charles Champness, boat builder, is building fourteen large yawl boats for the new steamships building at the Globe Shipbuilding Co.'s, the Cleveland Shipbuilding Co.'s, and Quayle's Sons' shipyard.

Captain Jos. Collins, who is superintending the building of the two Ash boats at Quayle's Sons' yard, has returned from Buffalo, where he has been spending a few days with his family. He reports some very cold weather and lots of ice.

John Corrigan returned to this city from Chicago, where he had been looking after his vessel property, the steamship Aurora and consorts David Dows and G. W. Adams. He says there are very few grain charters, in consequence of the small amount of grainin the elevators.

The heavy gale of Tuesday night carried away the mizzen mast of the propeller Fairbanks, laid up in the old river bed. The mizzen mast collided with the smokestack, damaged it considerably, and bore it down to the deck, so that the Fairbanks will require a new mizzen mast and smokestack, in addition to the work done on her at Radcliffe's shipyard.

The 650 men ,employed at the Globe Iron Works Co.'s shipyard are dingdonging away merrily upon the three fine new steel steamships, building for the Lehigh Valley Transportation Co., the Cleveland Mutual Transportation Co., and No. 1 of the six, to be built for the St. Paul, Minneapolis & Manitoba Railroad Co. The frames are all ready to go up for No. 2 of the latter company as soon the Lehigh Valley Co.'s steamship goes off the stocks at the end of this month.

The Oscar Townsend and Edward Kelley have been sold through Captain Henry Brock to Captain Edward Chilson and others, of Lorain; consideration, $60,000 for the pair. Captain Chilson will sail the Townsend. The master of the Kelley has not yet been appointed.

Meteorological summary for the week ending February 8, 1888:

Mean barometer	29 90
Mean temperature	28.4
Mean humidity	79.7
Total precipitation	.84
Prevailing direction of wind	South
Total wind movement	1163
Av. cloudiness	7 3
Av. state of weather	Fair.
Max. temperature, highest	38 0
Min temperature, lowest	11.5

W. H. HAMMON, Sergt. Signal Corps, U. S A.

The fine steamship A. P. Wright was launched from Thos. Quayle's Sons' upper shipyard at 3:32 p. m. Monday. The launch, like all others which come off at Quayle's shipyard, was a most successful one, without a hitch of any kind to prevent the noble ship from gliding off the stocks into the element over which she is destined to float. The A. P. Wright is a magnificent specimen of marine architecture, and is as strongly and well built a steamship as ever was launched. Her owner, Frank Perew, who, with his son Master Robert, arrived from Buffalo to witness the launch, feels very proud of this new addition to his fleet which comprise the steamship John B. Lyon and schooner John M. Hutchinson. Particulars of the A. P. Wright's dimensions, etc., were published in our last week's issue.

The new enterprise at the upper end of the old river bed, which in the future will be known as the ship owners' drydock, came into tangible existence Tuesday. A charter having been obtained a well attended meeting of those who had agreed to take stock in the corporation was held Tuesday afternoon in the office of Harvey D. Goulder, Esq., at the Wiltshire building. Here the organization was proceeded with without much ceremony. A choice for directors resulted as follows: Captain Thomas Wilson, Mr. M. A. Bradley, Mr. William Radcliffe, Mr. Valentine Fries, Mr. H. D. Coffinberry, Captain J. C. Gilchrist, and Mr. Robert Wallace. An election of officers followed, resulting in the choice of Captain Thomas Wilson as president; Mr. M. A. Bradley vice president, Mr. Gustave Cold secretary, and Captain J. C. Gilchrist treasurer. Mr. William Radcliffe was elected general manager and superintendent. Over one hundred thousand dollars of the capital stock estimated as necessary for the new enterprise has been subscribed, and 40 per cent of the subscriptions were promptly paid in.

Through the courtesy of Mr. Frank Manton, agent for the American Ship Windlass Co., we have received their illustrated catalogue for 1888, showing some new and useful improvements in their invaluable and well known machines. When we consider that nine-tenths of the vessels on the lakes use the Providence ship windlass, we may better understand their value in facilitating their work aboard ships. The catalogue is very complete, containing cuts of the various sizes and styles of windlasses and capstans manufactured by them. Besides this there are also cuts and prices of other standard improvements for which they are sole agents: The patent rudder supporters, Mr. Herman Winter's patent hawse pipe stoppers, patent wharf drop, patent method for towing vessels, Captain Thomas Wilson's convertible anchor and freight hoisting apparatus, E. T. Enos patent sheet holder and stock gatherer and numerous other modern labor-saving inventions that have given the American Ship Windlass Co. their prestige throughout the marine world. Masters and owners will do well to consult this firm before furnishing their vessels elsewhere. The testimonials from many of the most prominent shipowners of our country bear us out in making the statement that the Providence steam windlass and capstan are the best in the world. Results decide in favor of this firm's machine's in every point of excellence.

CHICAGO.

Special to the Marine Record.

Captain Mack, of Cleveland, was in the city Monday.

The tug Chicago, is receiving a new boiler at the American boiler works.

The following vessels have contracted to carry corn to Georgian Bay at 3¼ cents per bushel. Thomas Howland, Hower, Sunrise, E. B. Maxwell and A. E. Vickery.

The Lem Ellsworth, is loading grain at the South Chicago elevator, for Buffalo at 3¼ cents per bushel.

The Chicago Dredging and Dock Co. have no large contracts as yet for the coming season but are busy doing local work. They have a large force of men doing the preparatory work toward removing the Wells street bridge soon as it will be replaced by a new steel swing bridge soon as it will be expedient to begin the work.

The schooner Halstead, which was sunk last fall has been raised and thoroughly rebuilt at the Chicago drydock. Since last reports from here work has and is being done on the Skylark, Wm. Jones, D. R. Martin. The Oak Leaf, has had some new decking and her cabin rebuilt; the J. E. Wilber, steambarge Iron City, propeller C. Tower, recalking; the schooner John Kelderhouse, is having a general overhauling; she will get new frames aft, new ceilings, transom, five strakes of plank outside, new keelson, al through, new windlass, stanchions some new rail and thorough recalking. Captain Neil Blaney, who sailed her last season will command her this season.

At the Miller Brothers Drydock's, they have in dock No. 1, the schooner Herschel, she will receive a new centerboard box; the schooner White Cloud, will have a thorough rebuilding; in dock No. 2 are the tugs Geo. B. McLellan, J. H. Hackley, O. B. Green and Uncle Sam. They will have all necessary repairs to put them in first class condition for the coming season. In dock No. 3 the schooner David Dows, is having a thorough recalking.

The Hallett Iron Works, shipsmiths, on the south branch are running a force of seven men and doing nothing to speak of but vessel work. They do besides shipsmithing an extensive business in bridge and dock work, and ornamental iron fence.

The Donaldson Brothers, who do the vessel blacksmithing at the Miller Brother's drydock are kept very busy running with a full force every day.

City Engineer Northway said that the ice blockades at the crib had given no special trouble during last Friday. Thursday night men had to work with the tugs nearly all night to keep the ice from stopping up the intakes and shutting off the city's water supply. Two tugs were used, and yet in spite of this one of the intakes was clogged for a short time. This, however, is but a repetition of the occurrences of the past week, and until the ice finally disappears it will be necessary to keep tugs at command to be used at a moment's notice. The Hackley and another boat are detailed for this special service, and the Geyser is always at command. A Goodrich steamer got fast in the ice about three-quarters of a mile from the crib early in the morning Mr. Northway anticipates no danger whatever to the water supply of the city. The crib-keeper reports that the ice is very thick about the inlets, but he anticipated no danger. Captain Gilliman, master of the City of Ludington, stated that he left Milwaukee Friday night at 7 o'clock, and the ice did not trouble him much until he got within a mile of the crib, shortly after 5 o'clock in the morning. Toward afternoon the thaw had a visible effect upon the ice and the steamer was able to forge ahead, and by 3 o'clock was fast alongside the wharf without any damage having been done or anything further happening than a delay of a few hours. The City of Ludington carried no passengers.

The Lake Superior Transportation Co. will remove their offices from the corner of Washington and Market streets, to the dock formerly occupied by P. Connor, at the corner of Rush and North Water streets. Captain Allan McIntyre, who has been master of the Peerless since she first came out, has been promoted to superintendent of this line of boats. The following appointments of masters and engineers have been confirmed: For the City of Duluth, Captain Lyman Hunt master, H. Chalk engineer; steamer Peerless, Captain H. C. Page master, W. Conley engineer; steamer City of Traverse, no master appointed, R. G. Payne engineer; steamer Hurd, Captain J. W. Twitchell master, Wm. Lelands engineer; steamer City of Fremont, Captain Jas. Sullivan master, engineer not yet appointed; steamer Jay Gould, Captain Daniel McLean master, S. W. Armstrong engineer; and for the J. A. Calbrick master not yet appointed, and the engineer will be M. Downer.

The Jay Gould is in the Union drydock at Buffalo. She is being thoroughly rebuilt and will have either a three quarter or full cabin.

The schooner R. B. Hayes has been sold to Captain Wm. Griffin, of Buffalo, for $26,000.

June Snider et al., executors of George Snider, vs. Boston marine insurance company of Boston. Libel $2,000. Appeal by respondents from U. S. district court. Robert Rae, proctor for libelants; Schuyler & Kramer for respondents.

We hear of no charters for the coming season, and upon asking a prominent vessel agent the reason, he replied that in Chicago the shippers have storage yet for two or three million bushels of grain, and taking the new tonnage into consideration, freights will be lower. We also had a chat with a vessel man who, in turn, thinks if he does not hurry, freights will be higher.

HOPKINS.

DETROIT.

Special to the Marine Record.

The barge E. C. Roberts was sold by B. Whitaker to T. L. Robertson, of St. Clair, for $8,500. The insurance value is $5,600 and she registers 261 tons.

J. W. Westott & Co. purchased the barge Colorado for $2,500.

The brotherhood of lake marine engineers, of which Wm. McKittrick is chief engineer, comprises ninety-five members, who are using their utmost endeavor to make it a success.

The small propeller wheel for the Mackinaw transfer steamer St. Ignace which has been cast at the Detroit Drydock Iron Works, weighs seven tons.

Captain P. M. Gotham, who sailed the schooner Ishpeming the past season and who has been keeping ship on the steambarge Chenango in Detroit this winter, was taken to his home in Adrian, Mich., on the 7th inst., sick with typhoid fever.

A special from Detroit gives the following list of sales made this winter at that port, some of which have already been reported: Schooner Mineral State in damaged condition to L. L. Slyfield for $5,000; one-third of the schooner Montcalm J. C. Fitzpatrick to John Andrews for $2,666,66; steamer T. W. Snook for Cook & Wilson to Rice & Van Buskirk for $9 000; schooner S. V. R. Watson for J. H. Degraff to Scott Wallace and others for $16,000; barge Bay City for George Wallace to E. C. Recor and others for $6,750; barge Monitor for A. H. Piper to John P. Sullivan for $7,000; tug Ballentine for John P. Sullivan to Wickham & Co. for $3,000; schooner Pomeroy for the John Spry Lumber Co. to Farwell and Scott for $11,000; barge E. C. Roberts for Penoyer Bros. to F. L. Robertson and others for $8,500; schooner David Stewart for McKenzie and others to White Wallace and others for $15,000.

Steamboat and vesselmen visiting Detroit who are looking for a hotel where they can obtain home comforts and live in good style upon reasonable terms and fall in with many of their old comrades, should go to the Colbourn house, 11 to 17 East Congress street, one block from the City Hall, kept by Captain H. L. Brown & Son, who will accord them an especial hearty welcome and see that they are well provided for. Street cars pass the house, running to all points along the river.

WILLIAMS.

BUFFALO.

Buffalo ship brokers report an active inquiry for vessel property from all lake ports. There seems to be a scarcity of boats adapted to carry lumber and the call for this class is more than for all others put together. The Western transit company has chartered the propeller Wyoming. The consideration is $35,000, the company agreeing to fit her out, pay all expenses of navigation and to lay her up. The schooner Our Son, owned by Kelly, of Milan, O., was sold to George C. Hollister, of Tonawanda, and Cyrus H. Woodruff, of Buffalo, for $24,000 cash. She will be in the Prindle tow. Geo. H. Lamy has sold the Autanto to Thos. E. Walkers, of Marine City, Mich., for $2,500 cash. Henry Leisk, of Milwaukee, sold the F. M. Knapp to Edward Smith, of Buffalo, for $9,000 cash. Capt Joe Deville has bought the schooner P. S. Marsh for $18,000.

The Anchor line schooner Annie Sherwood has been sold to Bigelow Bros. of Chicago for $18,000 cash. She will go into the lumber trade between Ashland and Chicago in the tow of the White & Friant, which is owned by the same parties. The Sherwood was built in 1866.

At the meeting of the West End Rowing club, Michael J. Byrne was re-elected president for the ensuing year.

MUSKEGON.

Special to the Marine Record

The following are the dimensions of a boat being built here by the Berrey Bros.: 100 feet over all, 21 feet beam, 3 feet hold, draft 5 inches when light. She will have a double engine 14x16, side wheels and will be engaged in carrying tan bark down Muskegon river, the coming season.

The harbor tug Commodore Jack Berrey, that was damaged by fire last fall, has received a new house and will be in fine shape for the coming season.

The tug Frank Geele, that was burned last fall to the waters edge, is being rebuilt from her keel up and will be in good shape the coming season. She belongs to the Berrey Bros.

The Muskegon Boom Co., tug 3rd Michigan is getting rebuilt from the water line and will do much better work the coming season than the last year or two back.

J. H. McKinzie formerly a surfman in the Life Saving Station here, last year keeper of the North Manitou Island station, and at present keeper at South Haven, successor to B. A. Bross was in the city a few days ago visiting friends.

The following are the names of the steamers and tugs at this port: Passenger steamers, I. M. Weston, Carrie Ryerson, E. L. Hackley, George P. Savige, Centennial, Nellie.

Muskegon tug association, Commodore Jack Barrey, North Muskegon, G. P. Kingsburey, John Torrent, Newel Avery, Frank Geele, Correy Fuller.

Muskegon Boom Co., tugs, I. O. Smith, 3rd Michigan, A. P. Watson, Comet, Kelley Brothers, R. P. Easton, J. H. McGraft, Winnie Mear, Poney, Boss, and a few other tugs that are engaged in transferring the scows, tug Col. Ferry, Tiger, Fire tug, Fannie Misner. T

EAU CLAIRE.

Fine moderate weather prevails, and the snow is packing nicely, which will greatly facilitate logging work. Camps are being reinforced with more men, as fast as their services can be obtained, and it is expected that loggers will be able to catch up with the shortage caused by the deep snow and cold weather.

MT. CLEMENS.

Special to the Marine Record.

The work on the new barge for the Tonawanda barge line, is progressing very fast, having already seventy frames up. The amount of men working on her is about forty-five. The same company is also doing general repairs on the tow barge Alvina, also a thorough over hauling to the scow Eugene Vesta, new stanchion, new deck and two new spars. The work is done at Captain Dulac's yard.

L.

MARITIME LAW.

COLLISION—SAILING VESSELS—RIGHT OF WAY —WHEN IT SHOULD BE YIELDED.

U. S. District Court, Southern District of New York.

1. There is no absolute right of way at the peril of immediate collision, and in the presence of such peril, both of the two approaching vessels are bound to give way and depart from the usual rule, where adherence to that rule would bring on the collision, which a departure from the rule would plainly avoid.

2 Two yachts, the C. and the N. were standing up the lower bay of New York, both close hauled on the same tack and heading for about the same point. The C. was to windward of the N. and was heading a little more off the wind and making more leeway than the latter. Owing to the drift of the C., their courses crossed more than their headings indicated, and each, supposing the other to be an overtaking vessel, held her own course until collision ensued. Held that under old rule 17, the C., being the windward vessel, should have kept out of the way; as the international regulations for preventing collisions seem to be applicable to navigation below the narrows in the Bay of New York, she should have kept out of the way under article 24 of these regulations; but as both vessels were in fault for persisting in their courses in the face of peril of collision, held, that the damages should be divided.

Brown, J.

Towards evening on the 25th September, 1887, the yachts Chessie E. and the Non Pareille came in collision along the westerly edge of the channel in the lower bay about half way between Fort Wadsworth and Hoffman Island. The yachts were both sailing up the bay, close hauled on the port tack, heading for Fort Wadsworth or a little to the eastward of it. The wind was light from the north west, and all were making only about three knots an hour.

The Chessie E. was a small sloop rigged yacht drawing only from 12 to 18 inches of water; the Non Pareille was much larger, yawl rigged, drew 11½ feet, and could be, and was, kept about half a point nearer the wind than the Chessie E. The Chessie E. had left Hugenot, near Princess Bay, on Staten Island, and after standing over toward the Long Island shore had put about and run across the channel of the bay into the shoal water toward the Staten Island shore. In doing so she had crossed some distance ahead of the course of the Non Pareille which had shortly before come down from New York, and had turned about in the lower bay, and was then coming up a little in advance of another sister yacht, the Cythera, of the same size and so similar in appearance as not to be distinguishable except by careful attention.

The Chessie E., after reaching the shoal water on the Staten Island shore again came about upon the foretack, heading for about Fort Wadsworth, as above stated. Those on board testify that Non Pareille was either directly astern, or a little off their starboard quarter and overtaking the Chessie E; that the Chessie E. held her course without change, close hauled, and that the Non Pareille held her course a little nearer the wind, until the latter ran her jibboom through the Chessie E's mainsail, doing her some damage, and greatly alarming the ladies on board.

The owner of the Cythera, on behalf of the Non Pareille, testified that he was about 200 yards distant from the Non Pareille, and about 4 points on her starboard quarter; that the Chessie E. was the overtaking boat; that at the time of her last tack, she was considerably to windward and quite a distance off the port quarter of the Non Pareille, and thence gained considerably on the other boat, as she was in shallow water and met less strength of the ebb tide; that having, however, much less draft of water, she also made much more leeway, and that through this greater drift to leeward as well as her heading a little more off the wind, she was really crossing the Non Pareille's course by a much larger angle than by her heading she seemed; that the Chessie E. continued to gain upon the Non Pareille until she had passed out of his view abreast of the Non Pareille and behind her sails some 70 feet to windward of her, and he supposed she would clear; but that after three or four minutes she again appeared under the Non Pareille's bows, and that a few moments after they came into collision.

The latter account is in the main confirmed by other witnesses who were on board the Non Pareille. Her mate a very competent seamen, testifies that when the Chessie E. was off their bows, and some 8 or 10 feet only distant, he thought there must be some mistake, and reported her to the captain. The latter however, ordered the wheelsman not to give way, and the course of the Non Pareille was maintained until collision. The Non Pareille's witnesses also testify that the wheelsman of the Chessie E., when near their bows, ported his wheel and swung to Chessie E. upon the course of the Non Pareille. They were not in a situation, however, to observe well the wheel of the Chessie E. The latter's wheelsman denies any such movement and as it is also improbable, I cannot accept this version.

The foregoing accounts are so diametrically opposite as to which was the overtaking vessel and their relative positions, that each side ascribed to the other confusion and mistake as to the identity of the boats; the Non Pareille insisted that the Cythera, which was from 150 to 200 yards astern of her, was mistaken for the Non Pareille; while the Chessie E. insists that she was mistaken, as respects her alleged position astern, for another similar yacht which was in fact in the immediate vicinity, and which shortly after the collision came to her assistance.

I do not find it necessary to determine the dispute in that respect, or even which was the overtaking vessel, because I am satisfied that whether the primary duty to keep out of the way under the rules devolved upon the one or the other, each, where the danger of collision was imminent and palpable, persisting in her course, and voluntarily incurred the collision rather than yield her supposed right of way.

There is no such thing as a "right of way to run into unnecessary collision. The rules of navigation are for the purpose of avoiding collisions; not to justify either vessel in incurring a collision unnecessarily. The supreme duty is to keep out of collision. The duties of each vessel are defined with reference to that object; and in the presence of immediate danger both, under old rule 24 or new rule 23 are both to give way and to depart from the usual rule, when adherence to that rule would inevitably bring on a collision which a departure from the rule would plainly avoid. Sunnyside, 91, U. S. 222-224; the America 92 do. 438; the Columbia, 23 Blatch, 298; Fed. Rep. 844; the Aurania, 29 Fed. Rep. 99 126.

In this respect, the present case, is a reproduction upon a small scale between sailing vessels of the principles involved in the case of the America, *supra*.

I am inclined to think that this case, like that of the Aurania and Cayuga (14 Wall, 270) is not a case of overtaking, but rather of crossing vessels. I can not doubt that the yacht that the owner of the Cythera saw abeam of the Non Pareille, and that disappeared behind the latter's sails and then then reappeared under the port bow, was the same yacht, and was the Chessie E. The observer's line of vision would have placed the Chessie E., when she thus disappeared, partly ahead of the Non Pareille; and she was then so far to windward of the latter that no one apprehended any collision. If she was really gaining upon the Non Pareille at the prior time when she was directly abeam of the latter, she would be still further distant, and so much so that I think no precautions to avoid collision could then be reasonably supposed necessary to be taken by either. In the case of the Cayugait was held that the situation is to be regarded as it is, not at some remote prior period, but at the time only when the need of precaution first arises. Upon the above wind when the need of precaution arose, the Chessie E. could not have been astern of the Non Pareille, or at least not so much as two points aft of abeam, but a considerable distance from her, abreast or nearly so; but as her heading converged toward the heading of the Non Pareille their courses were crossing, and formed the greater leeway made by the Chessie E., her actual course was more crossing than it seemed. In such a situation, as was held in the case of the Aurania, the rule as to crossing and not overtaking vessels applies.

While the Chessie E. was thus slowly drawing ahead of the Non Pareille. but drifting down upon her very much faster, the sails of the Chessie E. would, for a time, prevent the witnesses on board from observing the Non Pareille, unless they were looking for her; and it is remarkable that several of these witnesses did not see or remember but one yacht, except the small yacht that afterward came to their relief. The probability seems to be that the Non Pareille was not specially noticed by several of the witnesses until the Chessie E. was drawing ahead of her, when she appeared very near, partly astern, and apparently running into the Chessie E. from the drifting of the latter.

Upon this view, under old rule 17, it was the duty of the Chessie E., as the vessel to windward to keep out of the way of the Non Pareille, which was to leeward. Under the international regulations adopted by this country March 30, 1885, which I am inclined to think should be held applicable to navigation below the Narrows, as being within the "coast waters" rather than in the "harbor" of New York the same duty would devolve upon the Chessie E., under article 24, as the maneuver required by the ordinary practice of seamen under the circumstances of the case.

If in the above view it was the primary duty of the Chessie E. to keep out of the way, that fact would not excuse the Non Pareille for persisting in her course at the last moment.

I am satisfied from the evidence that a few moments before this collision, each of these vessels could have avoided it by a slight maneuver, which each refused to make on account of her supposed right of way. But as I have said, there is no absolute right of way at the peril of immediate collision. The rules of navigation are administered and enforced, not with reference to the supposed rights of the vessel or her owners alone, but also with reference to the danger to the lives and property of innocent third persons. The law, therefore, requires that each in the presence of immediate danger shall do what it can to avoid collision. I find that each of these yachts persisted in her course when a slight maneuver easily made by either might have avoided it, and that the damages and costs must, therefore, be divided.

December 29, 1887.

OUR CONSULS.

We have frequently had occasion to draw attention to the reports received from our consuls abroad, and to the number of them that were absolutely useless, by reason of the absence of reliable information and the evident inexperience of many of those engaged in the service. We must confess, however, that recently a marked improvement has taken place; the information we receive is at once more trustworthy and more valuable, inasmuch as it is of a popular character, calculated to further the objects for which those reports are issued. Our merchants and manufacturers are taking advantage of those new facilities, and if anything were wanting to show the necessity of the British government encouraging this friendly rivalry, it is the avidity with which those interested in these matters scan the official documents. We are, however, a considerable distance, we regret to say, behind some other countries in this respect, and notably the American consuls, who, in the majority of cases, are practical men, knowing the needs of the commercial section and the political life of this country, and are always on the alert. We could have no better illustration of this than the popular American consulate at this port. Since assuming office, the Hon. C. T. Russell has introduced changes in the conduct of business in the consulate which have met with universal favour, and we have received many expressions of satisfaction from gentlemen of long experience in the American trade as to the facilities now in operation for advancing the requirements of the port. It cannot be denied that in times past the American consulate, in common with many other public establishments, was noted for a strict adherence to certain regulations in the conduct of business from which there was no variation, even although the slightest concession would greatly benefit the merchant and facilitate trade, and by no means inconvenience the official. Mr. Russell has evidently set himself to remedy this state of matters, and the reforms introduced have been of a most thorough character, resulting in a large increase in the number of transactions taking place at the consultate, all of which are now expedited in a manner not only gratifying to the merchant, but, we should imagine, altogether in accord with the desires of Mr. Russell's staff. One of the improvements of which Mr. Russell is the author, and which has come under our immediate cognisance, consists in the method of shipping crews. There can be little doubt that formerly abuses crept in, but the English system has now been adopted, even in the matter of advance notes, and the uniformity in practice should work well.—Liverpool Journal of Commerce.

AMERICAN MERCHANT MARINE.

Mr. Charles S. Hill, the secretary of the American shipping and industrial league has issued a call for a convention of the department of the Mississippi valley to meet at Chicago June 29. He says: "The south and west having originated this shipping league for the purpose of reviving the American Merchant Marine, all patriotic and industrial citizens of our country are invited to accept it as a tie in economic and patriotic work for mutual and hearty co-operation in industry and for the reduction of taxation. The Lake Shore and Mississippi department of the American shipping and industrial league will assemble in convention in the city of Chicago June 29-30. The object of the league is to promote the development and distribution of the products of American labor by an extension of the merchant marine of the United States, and to establish thereby more intimate commercial intercourse with other countries by frequent and direct mail service. All boards of trade, corporations, organizations and industrial interests, whether agricultural manufacturing or commercial sympathizing with this important national economic object are cordially invited to send representatives to co-operate in this work for the restoration of American ships built and owned in the United States. The governor of each state and mayor of every city within this department are invited to send representatives.

BOSTON AND LOCKPORT BLOCK CO.

BOSTON, December 1, 1887.

To Our Customers and the Trade:

We beg to inform you that the manufacturing business formerly conducted by the Bagnall & Loud Block Co., of Boston, and the Penfield Block Co. of Lockport, N. Y., has this day, been succeeded by the Boston & Lockport Block Co., with factories at Boston and Lockport, as formerly, and under former management. Both factories will brand their best goods with the "Star," their patent trade mark, and our patrons may depend that former superior quality, sold under that brand, will be fully maintained by both factories in future.

All future correspondence may be directed to either Boston or Lockport, as wants may require.

BAGNALL & LOUD BLOCK CO.
PENFIELD BLOCK CO.

LICENSED MASTER.

TREASURY DEPARTMENT, December 6, 1887.

To Collectors of Customs, Memphis, Tenn.

Sir: The department is in receipt of your letter of the 1st instant, in reply to its own letter of the 28th ultimo, in relation to the steamer "Rob Roy."

You say that this boat "Rob Roy" is not under 100 tons. She measures 100,02 gross tonnage, and therefore would not come under department decisions 4172, September 1, 1879."

In reply thereto, your attention is directed to the exact language of that decision in the matter of tonnage, which reads: "The department would include in the class last described all steam vessels of 100 tons or less not sailing under registry.

In conclusion you are informed that the department would consider it ill-advised in construing said decision to take into consideration the fractional part of a ton, as seems to have been done in the case of the "Rob Roy," for the purpose of debarring a steamer from its privileges."

A NOVAL BOAT.

The most novel craft ever built in this city is the cigar shaped tow-boat now building at the Pusey & Jones Co.'s shipyard for Alexander McDougall, of Duluth, Minn. The boat will be taken apart next week and shipped to its destination. This vessel, when completed, will be a steel barge 187 feet long, 25 feet wide and 18 feet depth of hold, with a carrying capacity of 600 tons. She will be used in carrying copper and iron ore and grain on Lake Superior and the other great lakes, Up to the water line she more nearly resembles a turtle back than anything else. Instead of a deck like an ordinary vessel, this craft will have a round top which will be a continuance of the hull. This top will describe an exact semi-circle, with a radious of 12½ feet from a point in the centre of what would be the deck of the vessel if she had one. This round top gradually tapers at each end, until it has dwindled to a circle three feet in diameter. The completed vessel will nearly resemble a cigar, pointed at the ends. On the rounded top, at intervals, will be nine sliding hatches through which the loading and unloading will be done. When loaded, these hatches are bolted down and made perfectly water tight. A bulkhead in each end will prevent her sinking. There is a big over-hang at her stern and her rudder is, consequently, considerably inside from the end of her stern. There will be little or no accommodation for men aboard. A little open station for the helmsmen will be placed on the top of the stern, and rails three feet apart will extend the length of the vessel so as to prevent those on top from being washed overboard. When closed the vessel will be thoroughly water tight, with the exception of the hause-pipes. It is intended to load her down almost to the beginning of her turtle-back.

The Pusey & Jones Co., is only building the tapering ends, Mr. McDougall will build the straight part of the vessel himself at his own shipyard, which he is now establishing at Duluth. He is interested in lake navigation and marine insurance. When he arrived in Duluth in 1881 or 1882, it was a village of 3,500 people, while now it is a city of 35,000. Mr. McDougall grew with the town and his prosperity and wealth kept pace with its rapid strides, until now he is considered a man of considerable means. Should the new boat prove as successful as expected, a fleet of them will be built to engage in the same trade—Every Evening.

CLEVELAND LIKE NEW YORK!

Jos. L. Kohn, practical tailor and cutter, conducting the Merchant Tailoring Department of Kohn & Co., 213 Detroit st., two doors from corner of Pearl, is introducing a new feature, namely: *To take measures* and *make to order* in the nobbiest style according to monthly new fashion plates, Gent's. first-class *Dress Suits, Business Suits, Evening Suits*, single *Pants* and *Vests* for the *same price* as is charged for ready-made clothing store garments. Doing *his own cutting* and measuring, (which alone saves $30 per week) paying no extra Rent, nor for fuel, etc., is what enables him to save every customer these additional taxes, usually charged in high-toned merchant tailor shops. He employs none but first-class tailors, guarantees perfect fit or garments will not be delivered and others made instead to the taste of the customer. KOHN & CO.

VESSEL PROPERTY FOR SALE.

FOR SALE.

TUG S. J. CHRISTIAN—Dimensions, 18 by 20, allowed 110 lbs. of steam, class A2, depth 7 to 8 feet of water, and is in first class condition. Valuation $7,000. Will sell her for $6,000. For further information inquire of owner, CAPTAIN M. ENRIGHT, 365 Ontario Street, Toledo, Ohio.

FOR SALE.

SCHOONER JOHN M. HUTCHINSON—Built by Quayle & Martin. Capacity, 1 900 to 2,000 tons. Inquire of FRANK PEREW, Buffalo, N. Y.

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SEVERAL steam and tow barges, schooners and tugs; also, three second-hand propeller engines and boilers. Address J. M. JONES, 52 Griswold St., Detroit, Mich.

HARBOR TUG FOR SALE.

THE TUG MYRTLE, of Sandusky, Ohio, for sale cheap. Is in first-class condition. For particulars write to FRED GROCH, Sandusky, O.

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TWO MARINE BOILERS—7½ feet diameter 17 feet long, allowed 90 lbs. of steam R. K. WINSLOW, Cleveland, O.

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SCHOONER MOSELLE—Class A2½, 245 tons, carries about 302,000 feet of lumber. Thoroughly rebuilt in 1886, and is in first class condition. Apply to MILLER BROS., 26 Market St., Chicago, Ill.

A GENTLEMAN of twenty years nautical experience just returned from Europe is desirous of a reengagement of master, mate or first class pilot, on steam or sail vessels. Address MAGNETIC DISTURBANCE, MARINE RECORD, Cleveland, O

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Propeller Benton, A2. Average load, 300M. $28,000.
Barge Midnight, A2. Average load. 385M. $8,000.
Barge Roscius, B½. Average load, $6,000M.
Terms to suit purchasers if parties good. For further particulars, address N. D. FISHER, Cleveland, O., E. J. VANCE, Bay City, Mich.

FOR SALE.

TUG ANNIE ROBERTSON—Length 51 feet, beam 13 feet 6 inches, depth 6 feet, engine 14 inches square, and new steel boiler 1st August, allowed 125 lbs of steam. For further information enquire of LAY BROS., Sandusky, Ohio.

FOR SALE, the passenger steamer M. E. MINTER, 13 tons net, 60 feet long over all, 18½ feet beam, 4 feet depth of hold. Engine 10x12, Scotch type boiler 4½x8. She is fully equipped for the passenger business. Terms, $2,000. Address, CAPTAIN RICHARD CONNELL, Muskegon, Mich.

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THIS SCHOONER classes A2, and is 434 tons burden. Her carrying capacity is 850 tons of ore or 580,000 feet of lumber Address J. F. GREEN, Willoughby, Ohio,

FOR SALE—A STEAMBARGE—260 tons register, 150 feet keel, 29 feet beam, 12 feet 3 inches depth of hold. Two engines 10 by 26 high pressure, 26 by 37 low pressure, compound twin screws. Boiler 16 feet 6 inches by 8 feet. Steambarge, engine and boiler all in excellent condition. Apply to WILLIAMS, Branch Office, MARINE RECORD, 252 South Water St., Chicago, Ill.

FOR SALE

THE powerful tug J. W. Bennett. Length over all 95 feet, breadth 17 feet, depth of hold 9 feet, draws 9 feet of water. Engine 22 by 24. For prices and information address SANDUSKY STEAMBOAT & FISHING CO., Sandusky, Ohio.

FOR SALE.

THE TUG CAL DAVIS—Over all 65 feet, beam 14 feet, depth of hold 6½ feet, draws 7 feet of water. Has boiler allowed 90 pounds of steam, outboard shaft (no engine.) All in good condition. Price, $1,200. For further information address HENRY LAY & CO., Sandusky, Ohio.

SCHOONERS FOR SALE.

THE ERIE & WESTERN TRANSPORTATION CO. will receive bids for the purchase of either or both of their two schooners Schuylkill and Annie Sherwood. The Company reserves the right to reject any or all bids. Bids will be received to and including February 1, 1888, by E. T. EVANS, Western Manager, Buffalo, N. Y.

FOR SALE.

SCHOONER VERNIE M. BLAKE—For sale cheap. Capacity 60 tons; dimensions, keel 56 feet, beam 19 feet 6 inches, depth of hold 5 feet 6 inches. Address 22 Territt street, Cleveland, O.

FOR SALE.

THE Steamers Russell Sage, John C. Gault, and A. L. Hopkins, all in first-class condition and rate A1. For full particulars address A. W. COLTON, Manager, Toledo, O.

FOR SALE.

PROPELLER TOLEDO—About 700 tons capacity. Apply to EBER WARD, 51 Griswold Street, Detroit, Mich.

FOR SALE.

SCHOONER MAJOR N. H. FERRY—Class A2, 171 tons, carries 200,000 feet of lumber on 8½ feet draft. Was thoroughly rebuilt three years ago and is in first class condition. Apply to MILLER BROS., 26 Market St., Chicago, Ill.

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TUG WM. E. ROONEY—12 by 12, 100 lbs. of steam, draws 5 feet 4 inches. SYRACUSE—12 by 12, 100 lbs. of steam, draws 6 feet. For further information inquire of SULLIVAN & HUBBARD, Toledo, O.

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THE ENGINE now in the tug MUNDY, size 10 by 11. Price $250. Address L. S. DELAND or RUSSELL M. BRADLEY, Bay City, Mich.

FOR SALE.

TWO STEAM FERRY BOATS—Will carry fifty passengers each; also, good-will and dock privileges. These ferry boats are operated on a ferry line that will clear $1,500 a year. A party interested is not a practical marine man and is engaged in other business, offers for sale entire business or will sell one-third interest to capable party to take full charge of same. Price, $3,900. $2,000 cash; balance on time Write for particulars. Address MARINE RECORD, Cleveland, O.

WANTED.

SITUATION AS PURSER—By a young man who has served seven years in that capacity. Good references if required. Boat sailing Lake Superior preferred. Address PURSER, 325 Theodore Street, Ottawa, Canada,

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TO BUY, on easy terms, a schooner of 250 to 325 tons capacity, on from 8 to 9 feet draft of water. Or such a vessel or barge to sail on a share of earnings. Address MARINE RECORD, Cleveland, O.

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We have associated with us Messrs. H. D. Coffinberry and Robert Wallace, late of the Globe Ship-building Co., and the Globe Iron Works, and Wm. M. Fitch, late of the Winslow Line of Steamers. We have made the following appointments: Mr. O. N. Steele, Assistant Superintendent; Mr. Thomas W. Bristow, late foreman of Wyandotte Ship Yard, Superintendent of Ship Yard; Mr. Quincy Miller, Superintendent of Boiler Shop; Mr. John Stoney, Superintendent of Foundry, and Mr. Jas. C. Wallace, Draughtsman.

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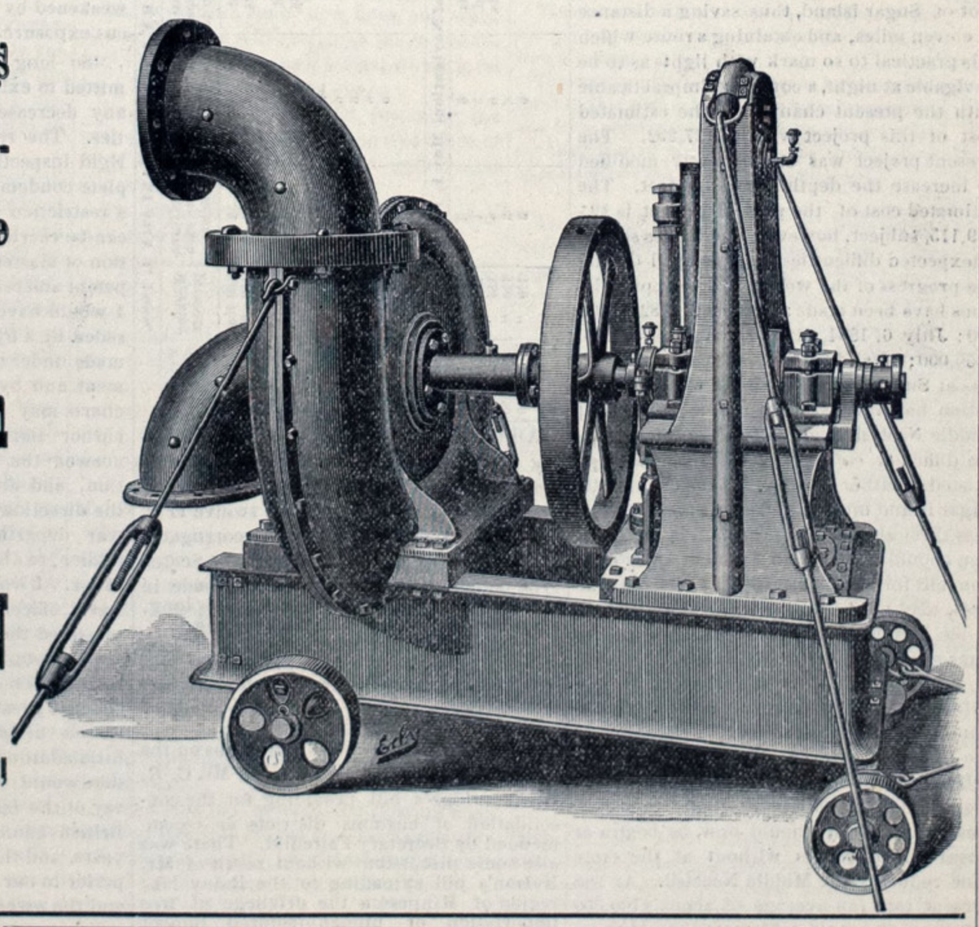

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Published Every Thursday at 144 Superior Street, [Leader Building] Cleveland, O.

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BRANCH OFFICE:
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THOMAS WILLIAMS, Associate Editor.

TERMS OF SUBSCRIPTION:
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Subscribers and others are respectfully invited to use the columns of the MARINE RECORD for the discussion of pertinent topics.

Entered at the Post Office at Cleveland as second-class mail matter.

CLEVELAND, O., THURSDAY, FEB. 9.

LAKE CARRIERS' ASSOCIATION,

TO CONSIDER AND TAKE ACTION UPON ALL GENERAL QUESTIONS RELATING TO THE NAVIGATION AND CARRYING BUSINESS OF THE GREAT LAKES AND THE WATERS TRIBUTARY THERETO, WITH THE INTENT TO IMPROVE THE CHAROTER OF THE SERVICE RENDERED TO THE PUBLIC, TO PROTECT THE COMMON INTEREST OF LAKE CARRIERS, AND PROMOTE THEIR GENERAL WELFARE.

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MARINE RECORD—OFFICIAL PAPER.

THERE will be a meeting of the board of managers of the Lake Carriers' Association, in the committee rooms of the Merchants' Exchange, Buffalo, on Saturday, February 11, at 11 a. m., to fix a date and place for the annual meeting. The constitution provides that it shall be held "between the first of December and the first of May, at such date and port as the board of managers may consider advisable, due notice of the date and place being given." The last week of February, at Buffalo, is suggested. Also for such other business as may come before the meeting. By order of the president,

FRANCIS ALMY, Secretary.

WORK IN THE INTEREST OF LAKE NAVIAGTION.

Mr. J. Whiting, who is at Washington as the representative of the Lake Carriers' Association, writes to that body that his time has thus far been pretty fully occupied with the appropriations desired for the Sault ste Marie lock and Hay Lake channel. In company with the Hon. Geo. H. Ely, of Cleveland, and Mr. F. Phelps, secretary of the Duluth chamber of commerce, a hearing was had before the house river and harbor committee on Thursday (2d) and a good impression apparently made. An introductory meeting of short duration with the senate committee on commerce Friday morning, resulted in the appointing of a sub-committee, who, at their option as to time, will take up in detail the question of appropriations for the new lock and the Hay Lake channel. Saturday afternoon an interview with this sub-committee was had by Mr. Ely, Mr. Whiting, Mr. Phelps, and Col. C. H. Graves, of Duluth. As Senator Palmer is chairman of this sub-committee, all the time desired was given. No intimation was received as to the impression made, but the facts presented must speak for themselves.

The bill which Mr. Palmer has introduced in the senate calls for an appropriation of $4,740,000 for the Sault ste Marie lock and approaches, and $2,200,000 for the improvement of the Hay Lake channel. It is hoped that, even though the full seven million dollars asked for the two improvements be refused, a special bill appropriating between two and three millions may be passed. This is, however, not at all adequate to the necessities of the case, and it is to be hoped that the committee will realize the importance of the work, and the urgent necessity of full and prompt appropriations.

Saturday morning was spent at the office of the lighthouse board, and of the supervising inspector general, but without accomplishing anything. Much patient waiting is requisite at Washington before the departments. The supervising inspectors have rescinded their order of a year ago, regarding the steering gear of steam vessels, but have passed no new one, so that all vessels are left to steer as they please. This is, of course, only partially satisfactory, but is perhaps all that could be expected. The board does not meet again until January next, so that nothing more can be accomplished until then.

A large number of bills that have been introduced in each house, for the present session of congress, have been gone through by Mr. Whiting, and copies of the important ones, affecting lake interests, will be forwarded to the board of managers of the Lake Carriers' Association.

This week Mr. Whiting goes with Hon. R. C. Parsons, of Cleveland, who represents the Cleveland Vessel Owners' Association, to the lighthouse board, and other departments, and it may be before one or two of the house committees.

The subscription to defray Mr. Whiting's expenses has been very general. Over forty members from Bay City, Buffalo, Chicago, Cleveland, Detroit, East Saginaw, Erie, Duluth, Grand Haven, Marine City, Milwaukee, Ogdensburg, Oswego, Racine, Toledo, etc., have volunteered to assume their prorata share, by tonnage. This is not only very complimentary to Mr. Whiting, but very satisfactory, as showing the awakened interest around the lakes in these important matters.

In his argument Mr. Ely cited the following extracts from the report of General Poe, regarding Hay Lake channel: The original estimates for the improvement were based on a project for a channel 300 feet wide and 17 feet deep, leaving the present navigable channel of St. Mary's river at Sugar island rapids (about two and a quarter miles below the canal) through these into Hay Lake, and then by way of the Middle Neebish, rejoining the present navigable channel at the foot of Sugar island, thus saving a distance of eleven miles, and obtaining a route which it is practical to so mark with lights as to be navigable at night, a condition impracticable with the present channel. The estimated cost of this project was $2,127,292. The present project was subsequently modified to increase the depth to twenty feet. The estimated cost of the present project is $2,659,115, subject, however, to changes should unexpected difficulties be developed during the progress of the work. Three appropriations have been made: August 2, 1882, $200,000; July 6, 1884, $125,000; August 5, 1886, $150,000; total, $475,000. Except a few test pits at Sugar island rapids the work of excavation has thus far been prosecuted only at Middle Neebish and Sailors' Encampment. No difficulty concerning the right of way existed at either locality, but the channel by Sugar island must, a portion of the distance, pass through private property, and provision should be made in the next appropriation bill for acquiring title in order that the work may not be delayed. If absolute title in fee simple is insisted upon, this will be somewhat costly, probably $10,000 for a strip of 400 feet wide. If simple right of way will satisfy the government, this can be obtained at a nominal price. I recommend the former, however. Thus far the appropriations have not been sufficient to warrant undertaking operations at more than one locality, but they should now be begun at Sugar island rapids without at the same time reducing the Middle Neebish. At the present rate (an average of about $100,000 per year), it would take more than twenty-five years to complete the work. With a view to more rapid progress and greater economy in carrying on this important work, which every one admits should be made as soon as possible, the sum of at least $500,000 should be appropriated, one-half to be spent at each of the two localities mentioned above, and the appropriation should especially be coupled with authority to purchase the necessary right of way, the cost thereof to be paid from the appropriation. At present this channel has no commerce worth mentioning, nor will it have until it is made navigable for the through traffic, when its commerce will practically be measured by that through the St. Mary's Falls canal. Ordinarily this in common with other improvements along the water route between Lake Superior and the lower lakes is spoken of as a Michigan work, while the fact is that Michigan's interest is only about 17 per cent. The remainder pertains to New York, Pennsylvania, Ohio, Illinois, Wisconsin, Minnesota, Dakota, and Montana Territories, and the dominion of Canada.

LAKE ERIE BOILER WORKS, BUFFALO, N. Y.

With the revival of iron ship building on the lakes comes the necessity for improvement in machinery and tools for the construction of large marine boilers. Messrs. Hammond & Coon, proprietors of the Lake Erie Boiler Works at Buffalo, on Lake Erie, were of the first to lay out a large sum of money in extending their plant. Through the courtesy of this firm we are enabled to give our readers the amount and style of marine work done by this firm the past year, and the number of boilers they have contracted for up to the present time:

LIST OF MARINE BOILER BUILT BY LAKE ERIE BOILER WOSKS FROM JANUARY 1, 1887, TO JANUARY 1, 1888.

No. of Boilers.	Type of Boilers.	Diameter of Boilers.	Length of Boilers.	Thickness of shells of Boilers.	Kind of Material.	Tensile strength of Plates.	Holes in shells punched or drilled.	Longitudinal seam overlapped or abut strap'd.	No. of rows of rivets in overlaped or abut joints.	No. of furnaces in each boiler.	Working pressure.	Weight in net tons, about.
2	Rectang'r Fire Box	8 ft. 6 in.	16 ft. 0 in.	9-16 in.	Steel.	60,000 lbs.	Punched. Drilled in Place.	Overlapped. Abut Joints.	3	2	100 lbs.	50
2	" Scotch.	10 " 6 "	11 " 6 "	8-10 "	"	"	"	"	6	2	150 "	49
2	" "	11 " 0 "	11 " 6 "	7-8 "	"	"	"	"	6	2	150 "	53
1	" "	11 " 6 "	11 " 0 "	7-10 "	"	"	"	"	6	3	100 "	28
3	Double End. Scotch.	11 " 6 "	18 " 0 "	8-10 "	"	"	"	"	6	4	110 "	195
12	" "	11 " 6 "	11 " 6 "	15-16 "	"	"	"	"	6	2	160 "	420
2	" "	12 " 6 "	11 " 6 "	8-10 "	"	"	"	"	6	3	110 "	70
2	" "	10 " 0 "	11 " 0 "	8-10 "	"	"	"	"	6	2	150 "	48
2	" "	11 " 6 "	12 " 0 "	3-4 "	"	"	"	"	6	2	150 "	70
6	" "	11 " 6 "	11 " 0 "	7-8 "	"	"	"	"	6	2	150 "	195
4	" "	" "	" "	7-8 "	"	"	"	"	6	2	150 "	112
38												1,218

List of Marine Boilers in course of Construction, to be Completed for Opening of Navigation, May 1, 1888.

No. of Boilers.	Type of Boilers.	Diameter of Boilers.	Length of Boilers.	Thickness of shells of Boilers.	Kind of Material.	Tensile strength of Plates.	Holes in shells punched or drilled.	Longitudinal seam overlapped or abut strap'd.	No. of rows of rivets in overlaped or abut joints.	No. of furnaces in each boiler.	Working pressure.	Weight in net tons, about.
2	Rectang'r Fire Box	10 ft. 0 in.	16 ft. 6 in.	3-4 in.	Steel.	60,000 lbs.	Drilled in Place.	Abut Joints.	6	2	125 lbs.	73
2	" Double End. Scotch.	6 " 6 "	13 " 0 "	1-2 "	"	"	"	Overlapped. Abut Joints.	3	1	120 "	27
4	" "	11 " 6 "	18 " 0 "	15-16 "	"	"	"	"	6	4	155 "	90
2	" "	12 " 6 "	12 " 6 "	8-10 "	"	"	"	"	6	3	110 "	70
2	" "	12 " 0 "	11 " 3 "	8-10 "	"	"	"	"	6	3	110 "	140
12												405

All the reveting, flanging, drilling, hoisting and handling is done by hydraulic machinery. All rivet holes drilled after plates formed in place. The twelve 11 ft. 6 in. by 11 ft. 6 in. boilers have corrugated furnaces. All the remainder of the Scotch type boilers have plain furnaces, made in sections from 2 feet to 2 feet 3 inches long, connected together by expansion flanges.

Besides the above boilers in course of construction, they have orders in hand for several large marine boilers for summer and fall delivery.

THE committee on ways and means on the 7th agreed to report favorably on Mr. C. R. Breckenridge's bill providing for the consolidation of customs districts as recommended by Secretary Fairchild. There was also some discussion without result of Mr. Nelson's bill extending to the Rainy lake region of Minnesota the privilege of free importation of unmanufactured lumber owned and sawed by American citizens in Canada.

SENATOR MITCHELL introduced a bill asking a bounty of $100 for each year's enlistment to seamen who enlisted in the United States navy between March 1, 1861, and March 3, 1863.

CLEVELAND VESSEL OWNERS' ASS'N.

ORGANIZED IN 1880.

Membership.....1887
Sixty-five steamers aggregating.....67,865 tons.
Ninety-five sail and consort, aggregating.60,089 tons.

Maintains shipping offices at Cleveland and Ashtabula Harbor. Regulates wages, protects crews, and takes cognizance of all matters in the interest of its members and of the Lake Commerce generally.

OFFICERS.

H. M. HANNA, - - - - - - President.
H. P. LILLIBRIDGE, - - - - Vice President.
B. L. PENNINGTON, - Secretary and Treasurer.
H. D. GOULDER - - - - - - - Counsel

EXECUTIVE COMMITTEE.

H. M. Hanna, H. P. Lillibridge, M. A. Bradley, Geo. P. McKay, Thomas Wilson, R. K. Winslow, W. D. Rees, J. H. Palmer, J. W. Moore, W. C. Richardson.

SHIPPING MASTERS.

A. R. Rumsey, 98 dock, Cleveland; Fred Bennet, assistant, 98 dock, Cleveland; Wm. Reunick, Ashtabula Harbor.

MARINE RECORD—OFFICIAL PAPER.

AIDS TO NAVIGATION.

The efforts of underwriters and others to secure additional lighthouses and other similar helps to navigation with a view to next year's casualties, set an old and experienced naval officer at Erie to observe that these gentlemen were beginning at the wrong end of the difficulty. Said the officer: "I have experience as a sailor on these lakes and I know that no increase in the number of lighthouses or other agencies will amount to anything as long as the present defective lake charts prepared by the war department are in use, and as long as the present lax regulations governing the inspection and loading of vessels and the employment of masters continue. The use of unfit and unseaworthy vessels for freighting and passenger service on the lakes has been a matter of frequent occurrence; the overloading of freight vessels has been even more common and notorious, while the cases where incompetent and intemperate men have been placed in charge of both sail and steam craft in the lake trade are by no means rare. The accidents on the lakes last season numbered nearly 1,000 with seventy-three vessels lost, with property valued at two and a half millions and 240 men, women, and children. It is no uncommon thing for so bermen in command of vessels to be utterly incompetent for the positions which they fill. Indeed, some of them are ignorant of the existance of local compass deviations, and I have known of captains who wondered why, when they steered northeast and reached a point, they could not steer southwest and reach their starting point, attributing it to the alleged influences of fog and other like nonsense. So many of these lake captains are guilty of willful inattention to important precautions. You will see vessels all along the chain of lakes lying in 'tanto' with every stick exposed and the rigging subjected to all the deterioration of weather influences. In the spring these vessels will put out again with rigging strained and weakened by this unnecessary and dangerous exposure.

"So long as this state of things is permitted to exist it is not reasonable to expect any decrease in the number of lake casualties. The remedy is to be found in a more rigid inspection of vessels and a more complete condemnation of those unfit to be used, a restriction of freight to the amount that can be carried with safety, and an examination of masters rigid enough to insure competent and reliable men in responsible places. I would have our present lake charts superseded by a hydrographic survey of the lakes made under the direction of the navy department and by naval surveys. The present charts may answer for the construction of harbor improvements, but they do not answer the requirements of lake navigation, and are not likely to be improved in the direction needed by the engineers of the war department. You cannot expect a soldier to make a navigation chart for a sailor. I would have such survey made by naval officers because many of them have mastered the work in the coast survey, and are thoroughly competent for the undertaking. The cost would be little and the benefits great and lasting. One or two small vessels besides the one now in use, and a little additional help detailed, would be all that would be required. The English survey of the lakes by Captain Bayfield, of the British admiralty, was completed in three years, and their charts are immeasurably superior to our own. With proper lake charts and the precautions I have named lake navigation would lose its terrors. As to harbor improvements, the only urgent need is a widening of some of the harbor months, and construction of their piers on diverging lines so that a stormbesten vessel may have as much smooth water as possible in steering for a harbor entrance."

We can hardly agree on all points, with the writer of the above and think that for average intelligence and keen perception it would be difficult to find a superior class of men than our lake executives are. Forewarned is to be forearmed, consequently to mark a danger when found to be such, is the first step in the right direction, as an aid to navigation and as a preventive to the recourrence of what, on most cases, are unavoidable accidents and to be classed in the same category as the failures in other business enterprises. Certainly no means ought to be neglected that would tend to the safer carrying on commercial pursuits and we would gladly hail each and every legitimate aid to lessen the danger to increase the efficency of our lake marine.

IMPROVE THE HARBORS.

In the Ogdensburg News of the 7th inst., appears an article headed "Interesting to Mariners," stating that a petition is circulated among vessel and steamboat men, to be presented to Mr. Baker, M. C., from Rochester, for the improvement of Charlotte Harbor, Lake Ontario and also the establishment of new lights in that neighborhood. This is very commendable and why should not the same be done in our city?

For the last two years "a feeble attempt" has been made to deepen the water in the harbor of Ogdensburg and with the insufficient appropriations obtained to do the work, very little improvement has so far been made, a little digging here and there is all that has been done, which has left the bottom very uneven and made shoal water where it should't be; last season an attempt was made to remove the boulders in the channel, but there is yet plenty left to cause trouble at low water. An appropriation of one hundred thousand dollars should be granted, at the least, and our M. C. should be made aware of the fact, in order to use his influence to the utmost to secure the same; should the city succeed in obtaining the above amount, we would recommend the removal of that part of the bar which projects into the center of the upper harbor and where the inner black buoy is located, and which for many years has been a nuisance and great obstruction, preventing tugs from handling their heavy tows and also large vessels from getting underway, and coming into the docks or mill elevator, and a straight cut from the ferry dock to the outer black buoy should be made at once.

The channel inside the bar, running from the O. & L. C. docks to the lower iron bridge forms actually a part of the Ogdensburg harbor and should be deepened to no less than 16 feet at extreme low water in the fall, and two hundred and fifty feet wide, which would give tugs and steamers ample room to handle and transfer heavy loaded vessels from the O. & L. C. docks to the upper harbor. As a general thing the bottom is soft and can be easily dredged out to the above named depth, provided the money appropriated is "judiciously" expended and the work superintended by somebody, who has an idea of what vessel and steamboat men wants.

Judging from the number of vessels and steamers in winter quarters at this harbor at present a marked improvement is plainly seen in our shipping trade and all possible means should be taken to increase and encourage that trade, by improving the harbor to the best advantage in order to accommodate the largest vessels and steamers, able to pass through the new Welland canal.

Permit us also, sir., while we are discussing the improvement of our harbor, to mention the insufficiency with which the River St. Lawrence is provided with light and buoys from Cape Vincent to Ogdensburg, which is the terminus for deep going vessels. We must admit that this splendid river is very poorly provided with lights, beacons and buoys.

From Cape Vincent in Ogdensburg cannot be found a safe range of lights to run by in the night, and some of the large steamers have lately struck on shoals, which never were known before, nor have they been located on the charts, although a survey was made in 1872 and 1873, by a corps of United States engineers, but very imperfectly done, and some future day more shoals will be discovered by deep loaded steamers striking on them. With a treasury overflowing with money that causes so much trouble to Uncle Sam's "trusted" agents what to do with, we would recommend that they send part of it up on the northern lakes and rivers where it could be expended "under good management to very good advantage."

Howard H. Baker & Co., ship chandlers, Buffalo, have orders booked for 200,000 lbs. of anchors and chains for spring delivery. They are intended for new steamers now under way at Buffalo, Cleveland, and Bay City. They have just closed a contract with the Union Drydock Co. to fit out the new steel steamer Chemung, now on the stocks.

BEAUTIFUL RESULTS OF A SWEET MELODY.

CAIRO, ILL., Feb. 6.

Special to the Marine Record.

You should have been present and heard the boys laugh when they took me from the top of the boiler in Furness' shop, and when they took down the big and imposing looking guage which George Galavan had cut from a sheet of tin, for to tell you the truth it was nothing but a piece of tin, with a lot of figures marked on it, a wooden pointer which an efficient brother shoved around with his finger. Then Stroder told the boys How I got pretty full while in New York, and that I wrote scien tific pieces for the paper, and that I was always blowin' about big steam and evaporation efficieney and—

"Does he belong to the M. E. B. A.?" asked Finn of Charleston.

"No!" said Dowd, "he was black-balled, because he was seen drunk at an engineers' ball."

"What! does he drink?" asked Tracy.

Three or four voices answered: "You bet he's a regular lusher. Why he is pretty full, now." Mr. Editor I was not, for I had only taken seven drinks with the boys, and they were small beers.

"Well," said Mr. Walker, of New York, while a look of mingled disgust and pain enveloped his features, "you did well to black-ball any man that gets drunk, for in my opinion a drunken man is never sure that he knows the difference between a piece of tin and a steam guage. And another thing, in my opinion it is not always the man who rushes in to print first, and uses the most beautiful metaphor that is really the brightest man. Why I tell you boys, Mr. Walker at this juncture uncovered and the entire delegation simultaniously followed him, "I've seen men that could write beautiful things about the sweet melody of a piano recital who could not play a note. You see men learn to perform upon the strings of imagination making some very pretty sounds indeed in which often times the rules of symphonious harmony have been ignored. So, too, I think it has been with this young, and I may add, every ambitious news paper man, he has learned a little about engineering, which with the whisky he drinks, and a certain felicitous method of manipulating words, he construes as meaning brilliency and rushes into print as a learned man."

After a round of applause and a general shout of "you git young fellow." I quietly got. The boys filed out, your correspondent following closely behind, and marched in a body to the City hall where D. B. Ramsy is the chief engineer, but Mr. Tracy would not go in, for he said there was no telling what might happen to a man in Chicago, so he sat on the fence and whittled a stick while the rest of the boys were gone.

I remained with Tracy, and he told me several stories, beside giving me a brief outline of each delegate which I will give you after while.

THE SECOND ENGINEER.

PISTON CLEARANCE.

Many cylinder heads have been saved and many dangers have been avoided by the care of the engineer in looking out for piston clearance when doing repairs about his engine. The clearance is so little, in these close calculating times, that every readjustment of rod boxes and quarter boxes has a greater effect on clearance than was the case with the old style cylinders when the clearance was an inch or so. Three-sixteenths of an inch, we believe, is now thought to be the thing for clearance in cylinders up to 16 diameter. This small space is sometimes a great deal crowded with water when the engine first starts, as the snapping of the valve on the seat testifies, and it is well to keep the spaces at each end as nearly alike as possible, or, if any difference, let it be in favor of the piston-rod end.

In case the piston-rod is screwed into the cross-head instead of being keyed, the clearances can be adjusted by that thread very nicely. Sometimes the connecting-rod is so made that one key lengthens and the other shortens the rod. Shims, as the boxes wear away, are always relied upon, but none of these things will, of themselves, make the presence and care of a good engineer of any less importance. It is a good plan to have permanent marks on one of the guide bars to show just what the clearances are. To make these marks, disconnect one end of the rod and shove the piston against the front head and then mark nicely on the guide bar at the front end of cross-head; then push the piston against the back head and mark again, at the back end of crosshead. Now connect up and turn the engine over by hand, and whatever the cross-head lacks of reaching these marks, will be the amount of clearance between piston and cylinder head. But, in case of a piston-rod screwed in, any change of that screw would make it necessary to go over the whole ground again, and make a new set of marks on the guide bars.—Iron Trade Review.

COMMERCIAL UNION.

The wide spread and constantly increasing interest in the matter of commercial union between the United States and the dominion of Canada, and the near approximation to unanimity in favor of such union, or of some other close reciprocal commercial relations, are the outgrowth of a very general recognition of the fact that an unnatural international boundary line divides one homogeneous people to the great detriment of both sections.

During the late war the contemplation of the possibility of a divided country caused a feeling of uneasiness which was aggravated by the fact that the north would be nearly cut in two by the close proximity of Lake Erie to the Ohio river. But the dominion of Canada is practically cut in two by the character of the country north of Lake Superior.

Then there is the most important system of inland navigation in the world, which is the common heritage of the two nations, yet it has its outlet through the territory of the dominion, which is not able to adequately improve it. Aside from the common interest of the states and Canada in this great lake system of navigation, the necessity for railroad lines to cross the boundary back and forth adds to the independence of the two sections. In addition to these considerations the commercial exchanges of Canada will be almost wholly with the United States.

A popular movement therefore, growing out of such conditions, is not likely to lose any of its interest with the lapse of time. Whether political union will ever take place or not commercial union is manifest destiny. With such union effected Duluth has prospective resources lying northwest equal to those lying southwest.—*Duluth News.*

THE AMERICAN MERCHANT MARINE.

One of the best reviews of the growth and decline of the American merchant marine under protection and free trade that we have recently seen is furnished by the address delivered by Mr. W. W. Bates, of Buffalo, before the shipping league convention of Washington on January 16. Mr. Bates believes with every true friend of the maritime interests of this country that legislation is needed to build up the shipping and enhance the growth of our foreign commerce. He points out the fact that, whereas, in 1810 we carried 90 per cent of our imports and exports, we are now carrying but 15 per cent. He declares that our reciprocity acts should be repealed, our free carrying treaties revoked, and the old protective tariff laws re-enacted in their stead. He shows that twenty-one of our states and two territories border upon tidewater coasts, and nine states upon the greater northern lakes. In this territory there is a population of about 45,000,000 and at least thirty large sea and lake port cities. We have upwards of 3,000,000 tons of all kinds of vessels enrolled in the coasting, lake, and river traffic, representing a vast investment. The building and sailing of this fleet gives employment to an army of 300,000 men, and it represents an earning power of $125,000,000. This, Mr. Bates thinks, is not sufficient. The merchant marine should be increased so that it could do at least half the foreign carrying trade and the laws should be so changed as to make that increase possible.—*Cleveland Leader.*

SAVING LIFE BY SHORE BOATS AND OTHER MEANS.

It seems almost incredible that the exertions of any person or persons, outside the members of the regularly constituted life saving stations, should be so totally disregarded in their attempts, successessful or otherwise, to save life.

It is well known that a reward for gallantry, or an acknowledgement, either local or personal, will stimulate the average man or woman to undertake risks, or, to say the least, suffer inconveniences with a much better grace than if the award was not tendered, and this is palpably true, even down to the gracious smile and a "thank you," on the street car.

If a system of national, state, or local awards could be inaugurated, and cognizance taken of each and every case of bravery and gallant conduct where the object was to save life or prevent suffering, we venture to say that the recent circumstance in Chicago, of four men drifting out on the lake in an ice-floe while a crowd of people stood inactively watching, would never occur again, for among the many who stood there, surely there was one pair of willing hands who could have hurried along a few casks and with a couple of boards a very tolerable raft could easily have been made and the men rescued before nightfall. We do not mean to say that the lookers on were callous or indifferent to the fate of their townsmen, but we do say that the knowledge of a vote of thanks, from a properly constituted body, would have stimulated those present to increased exertions, both mental and physical, instead of waiting for police officers to go a considerable distance and return with an old skiff which they found would not float until some necessary repairs had been made; consequently, the men who were adrift suffered great torture, and were only rescued at the eleventh hour, and the episode we presume forgotten by all except the police officers who probably hope never to be transformed into amateur boatmen again.

It would seem from the position of Cleveland, in connection with her large shipping industry, that she ought to take the initiative in forming a marine humane society, with the object of rewarding by vote of thanks or otherwise any special act of bravery performed by disinterested parties in relation to her maritime interests and the lives of those who are employed throughout the season in pushing along with the good work.

[*Around the Lakes Continued from 1st Page.*]

FRANKFORT.

Special to the Marine Record.

The following craft are in winter quarters at Frankfort this season: Scow Minnehaha, tugs D. P. Hall, Pottowatomie, Jessie Slyfield, L. Q. Rawson, Cynthia, John Smith, John Cowan, propeller Geo. D. Sandford, besides the numerous small sail fishing smacks.

January 3, steamer George Sandford was the first departure of the new year, for Manistee.

January 12, the Sandford arrived from Manistee, and just in time. At 4 p. m. the memorable blizzard of '88 set in.

January 14, propeller J. D. Dewar departed for Manistee, where she will receive repairs to her boiler. The first ice was formed on Lake Michigan.

Jannary 16, the Sandford attempted to leave, but the ice had blocked up the passage between the piers. The wind shifted in the evening, blowing the ice off shore, and the Sandford got away the next morning. The ice fields extend to the horizon. The Sandford returned at noon of the 24th and laid up.

The fishing tug John Cowan lifted her nets that had been set for three weeks past.

The fishermen are now cutting ice and are filling their houses.

The ice on Lake Michigan in this vicinity is now comparatively clear; at least out of sight of land. The passage between the Manitou Islands is blocked.

The suit of Chambers vs. Zimmerman over possession of the propeller J. D. Dewar, which has been in United States court for a long time, has been decided at last, the court turning the boat over to E. G. Chambers, of Bucyrus, Ohio. BURMEISTER.

PORT HURON.

Special to the Marine Record.

Men are at work on the Crosthwaite, tearing her down. She will receive an entire rebuild at Dunford & Alverson's yard.

Harry Shaw, the marine hustler from East Saginaw, was in the city recently, looking over some vessel property which he contemplates buying.

It has been reported that Ed J. Kendall, the marine reporter, was to sail the A. J. Wright. He wishes to say that he is not, but will be found at his office as marine reporter as usual on the J. W. Thomson dock.

The tug O. W. Cheney is having her cylinder bored out, some new flues, and when that is done she will challenge the world for any 18 by 22 that turns a wheel, which must be a Trout, as she swings one.

Everything is very quiet just now, the only place of importance being the office of Muir Bros., where the old tars gather and tell their ghost stories.

The Olean will be rebuilt by Dunford & Alverson the coming summer.

Captain D—, one of the twins, has been to Detroit; is mum; has something good I hope.

Weather permitting, Ed J. Kendall will give to all the captains of both sailing and steam vessels the use of his toboggan slide for one day and evening; ladies included.

Mr. George Bone will run the engine on the tug Cheney.

H. W. Maines and family are now in Maine on a visit.

The Botsford elevator company are at work building a mammoth elevator, just south of their small one.

C. M. Green, the reliable boat painter, has a large number of boats to paint as soon as the weather will permit.

It is rumored that A. N. Moffat will have charge of the Star line of steamer's business in this city next season. He will occupy the Grummond warehouse at the foot of Butler street.

Some mean cur entered the floating boat house of the Port Huron boat club recently, and smashed a very handsome double scull owned by the Lynn Bros. The boat is a complete wreck.

The G. T. R. R. car ferry Huron made 721 trips across the river at Point Edward during the month of January, crossing 6,716 cars. The International made 269 trips and crossed 6,118 cars.

The ice in St. Clair river gave way on Friday last, and the river is now open as far south as Marysville.

This is the first winter for some years that the ferry company have been able to keep Black river open from Military street bridge to the mouth of the river. No. 4.

MARINE CITY.

Special to the Marine Record.

The fleet laid up at this port is getting ready for repairs and painting. A goodly number of the sailor boys are cleaning the snow from the decks, etc., of the larger portion of the vessels.

The P. H. Birckhead has been sold, and the T. & S. T. Co.'s new steambarge Miami will tow the Birckhead's barges until the new steambarge now under construction for that company, under the supervision of Mr. Mart Lester, is ready for navigation.

The changing of steam and vessel property has been very limited at this port.

There has been considerable talk about the great ice-breaker, the transfer for the Straits, now being finished at Detroit. Don't strain your eyes until about the first week in March. The average thickness of the ice bridge here is about eight inches.

We have heard a great deal of comment in regard to the conspicuousness of the custom house sign. The residents of Marine City think the proper place for a custom house sign should be at the front of the building instead of being over the back door. Placing it at the front entrance would save much embarrassment to strangers.

Messrs. Morley Holland and the T. & S. T. Co. have taken advantage of the good sleighing to get out a large amount of A1 ship timber, which makes it look as if mechanics would be kept busy for some time to come.

The test gas well is getting along finely. The company says gas, oil, or China. We 'ave the salt, you know.

The work on the steamship Morley is progressing steadily. BOB.

TOLEDO.

Specialle the Marine Record.

Ship carpenters are in big demand.

No sign of a break up yet.

S. B. Grummond of Detroit was here Saturday.

Curtiss and Brainard have sold the steambarge P. H. Birkhead to Saginaw parties. It is reported that $40,000 were the figures.

Captain Homer Durrand of the schooner Anna P. Grover, has bought the P. B. Locke of Sandusky parties, for $7500. C. O. D.

A syndicate of Toledo capitalists, comprising Captain Chas. Hubbard, of Sullivan & Hubbard, Leander Burdick and G. G. Hadley, of the Sunday Creek coal company, have purchased from the Inter-Ocean Transportation company of Milwaukee, the steamer Monohansett and schooner Massasoit, for a consideration of $52,000.

The steamer Monohansett has a carrying capacity of 32,000 bushels of grain, or 850 gross tons of iron ore. The schooner Massasoit has a carrying capacity of 50,000 bushels of wheat, or 1,400 tons ore. Both vessels list A2 in Lloyd's, and are in fine repair.

The interest in the schooner Penokee, the property of Captain Hubbard, has been divided equally between the members of the syndicate, thus each hold a third in the boats.

The steamer will tow the two schooners the coming season, and will run principally in the iron ore trade.

The company and Toledo are to be congratulated in this acquisition to the vessel property, and from present indications there will be other equally pleasing accessions to the Toledo fleet of boats before the opening of navigation.

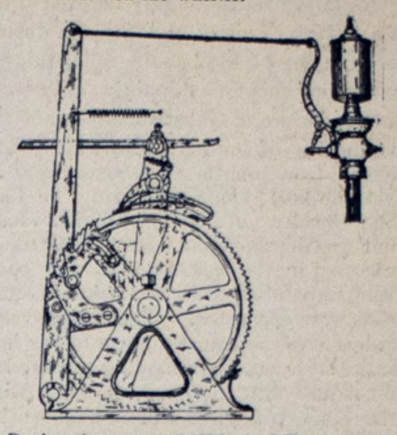
ERIE.

The state fish hatchery at Northville, received from the government Mich., this week six million whitefish, that being Erie's share of the stock. The roe came packed in trays in cotten flannel protected by damp moss above and sawdust around the outside of the trays as they were packed. The eggs were placed in thirty-six glass jars, each jar containing 160,000 eggs. Over and into these jars a constant stream of water from the city waterworks is kept running. The attendants watch these night and day. By an ingenious system of wire and batteries and indicators, the attendent is enabled to know the exact action of the water at all times. In the entire lot of six million eggs there were but few dead ones. It is expected that another consignment of 9,000,000 eggs will be sent here for hatching. As soon as the numerous minnows escape from the shell and enter the aquariums, they will be sent out and deposited in the lake points close by Erie. The first whitefish deposited in the lake three years ago are in the market.

THE CHASE FOG WHISTLE MAC INE.

The dangers attending fogs on the lakes are well known to all of our sailor men, and all know that the regulations require that during fogs, a signal shall be sounded at regular intervals. Under the old system of fog signals, the service and close attention of a man was required at all times while navigating in a fog, and this service became so monotonous that Mr. Chase, engineer of the steamer Ohio, devised and patented a machine which, when attached to the engine, would sound the fog whistle automatically.

The cut shows the position of the machine and its action on the whistle.



During the season of 1887, the following named steamships "thirty in number" were supplied and equipped with our machines. The same having given entire satisfaction in each and every case, we refer with pleasure, all those interested, to the owners and masters of said steamers.

Wilson Transit Line, Cleveland, O.—Steamers Spokane, Wallula, Kasota, Tower, Yakima, Missoula, Sitka.

N. Western Transportation Co., Detroit, Mich.—Steamers Fayette Brown, R. J. Hacket, Forest City.

Cleveland Transportation Co., Cleveland, O.—Steamers Sparta, Havanna, Vienna, Townsend.

Bradley Transportation Co., Cleveland, O.—Steamers City of Cleveland, Henry Chisholm, Superior, E. B. Hale, M. B. Grover, J. S. Fay, R. P. Ranney.

H. H. Brown, Cleveland, O,—Steamers Smith Moore, Chas. J. Sheffield.

Owen line, Chicago, Ill.—Steamers Ira H Owen.

Cambria, Outhwaite, Saml. Mather, R. R. Rhodes, Columbia, Aurora.

The machine is at all times under the control of the captain. That is if it is necessary that a signal shall be given to a passing steamer, or for any other purpose; the moment the captain pulls his wire, the fog whistle machine is thrown out of gear and will not resume its sounding until it is permitted to do so by the master.

Mr. G. C. Barnes, of this city has been to Washington to present the merits of the fog whistle machine to the board of supervising inspectors of steamboats, now in session there, and is well pleased with the results of his mission.

Following is the report presented by the committee.

To the President and Board of Supervising Inspectors of Steam Vessels.

Your committee to which was referred the "Chase Fog Whistle machine" beg leave to report: That we have carefully examined the same and find that it blows at regular intervals, being worked by the engine, thereby insuring regular and continuous blasts for any length of time that may be required and would recommend it or similar device to owners of steam vessels as an additional safe guard to navigation.

H. S. LUBBOCK,
GEO. H. STARBUCK,
W. D. ROBINSON. } Committee.

The manufacturers are the Chase Fog Whistle Machine Co., corner of Elm and Spruce streets, Cleveland, O.

NON-FOULING ANCHOR.

Captain E. E. Chase has invented a non fouling anchor which is as perfect as such an adjunct to a vessel can be made. The chain can not foul with the stock nor the flukes, and any vessel with one of these anchors can hardly drag ashore, as it is arranged in such a manner that the least opposition met by the flukes will right the anchor and it must hold. The guard attached to each end of the stock prevents the chain from fouling. If a vessel is ranging ahead the anchor can be let go, and will catch, or if she is riding around the anchor it will clear itself and take again. It is not necessary to get stern way on the vessel in order to let go. This device can be applied to any wooden or iron stocked anchor; that is, any anchor now on any vessel can be converted into one of these with very little expense. Another good feature is that when the anchor is on the rail the guard on the anchor will prevent the jib sheets from fouling with the stock. It is claimed, however, that the fluke on Captain Chase's anchor will hold stronger than the anchor now in use. Any one desiring to learn more about this device can do so by addressing Captain E. E. Chase, Northport, Mich. Any one wishing to see a working model will find it at Messrs. Grover & Son.

FOR SALE.

THE FINE IRON TUG M. D. CARRINGTON—Length of keel 67 feet, breadth of beam 16 feet, depth 8 feet 8 inches. High pressure engine 20 inches diameter, 23 inches stroke; boiler 14 feet long, 6 feet 8 inches diameter. She is in excellent condition. For further particulars apply to A. RUELLE, 372 Atwater Street, Detroit.

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Has been thoroughly refurnished and renovated. Rates, $1.50 to $2 00 per day. Special rates to steamboat and vesselmen, whose patronage is especially solicited.

DISCOVERY OF AN OLD NORSE WAR SHIP.

No object so thoroughly fascinated me in a visit to Norway and Sweden during the summer of 1882 as the splendid example of ancient shipping discovered shortly before at Gokstadt, on one of the peninsulas of southern Norway. The length from stem to stern over all is 78 feet, the keel alone measuring 66 feet. The breadth of beam is 16 1-2 feet, and the depth, about 4 feet. Oak alone was used in the constructson, the body being unpainted, while the stem and stern posts were decorated. The planks were laid on over the frame timbers in our lap-strake style, each overlapping the one below it and were fastened together with iron bolts rivited and clinched upon the inside—"clinker built," as we now call it. The planking was lashed to the frames by means of projections, with wicker like cords or withs, made from the roots of trees; and the seams were calked with hair of cattle spun into a cord of three strands, and this was not driven into the crevices, but laid in when the planking was put together.

From this method of construction, as well as from the character of the relics found and the use of the vessel as a means of sepulture, Mr. Nicolaysen infers that it was built during the later iron age, or between A. D. 700 and 1000.— John S. White, LL. D., in Scribner's Magazine.

A Duluth dispatch says: "The Duluth & Iron Range road has just let to Bradley & Sandford, lumberman, the contract for 70.000 lineal feet of piling for the new ore dock to be built this winter at Two Harbors. There will be 1.000, feet of extension, 500 on each dock, about doubling their capacity, and as the bents of biling, fifteen or twenty piles in a bent, are only six feet apart, the solidity of the foundation can be assured. The entire structure is to be as firm as it is possible to make it with timber and iron. C. L. White & Co., of Tower, successors to Sellers & Owens Lumber Company, have already received a contract for the timber work. The docks will be completed in the spring."

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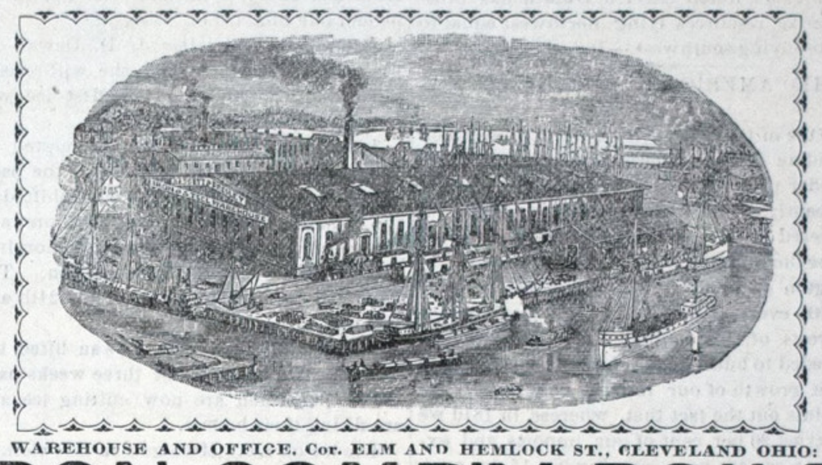

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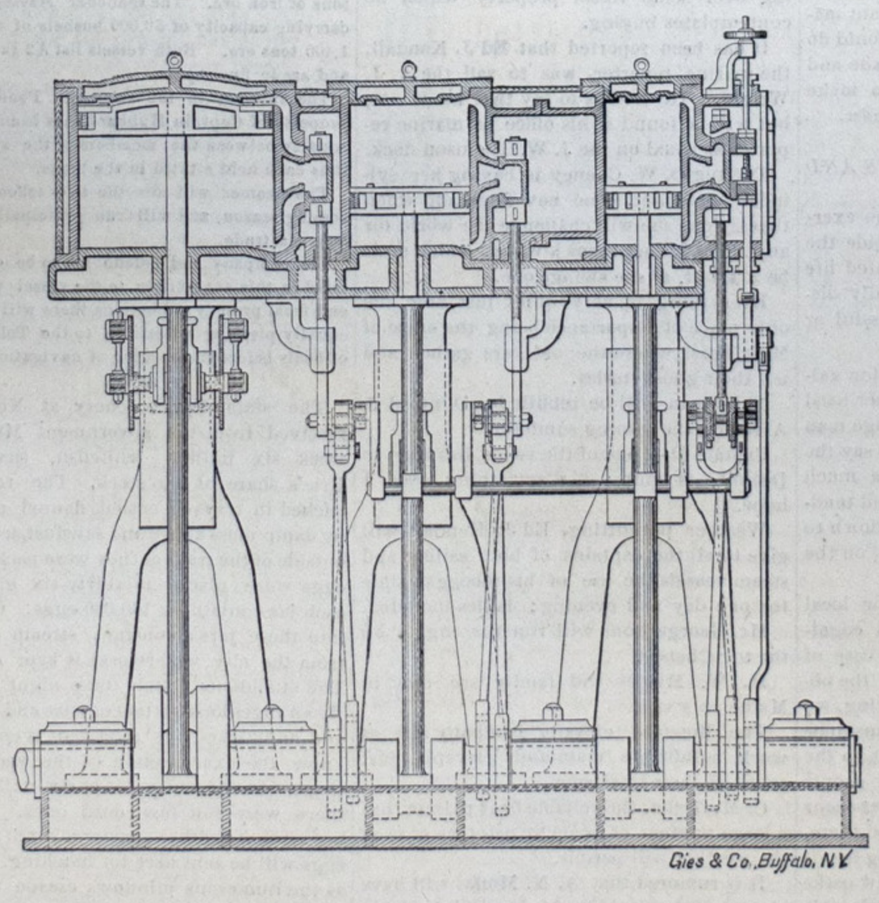

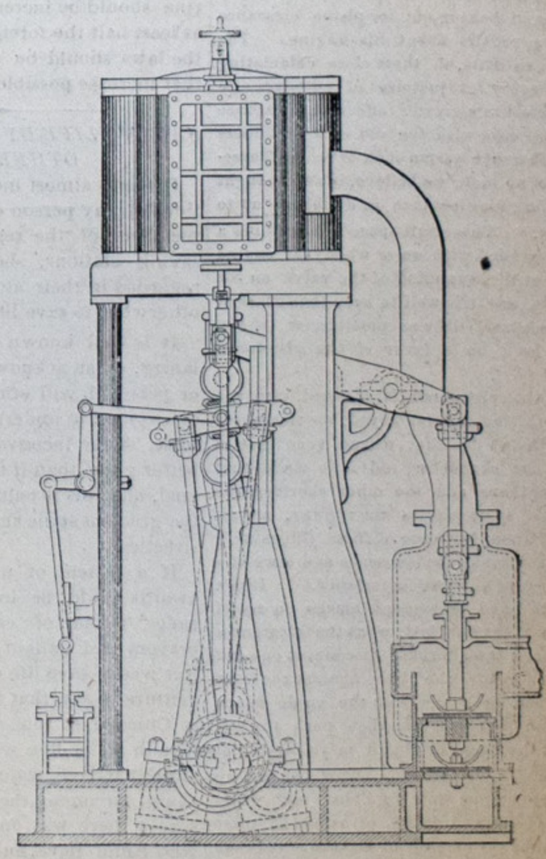

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Length 96 and 2-10ths feet, breadth 24 feet, hold 7 feet, (as per enrollment.) Capacity, 175M lumber under sail on draught of 8 feet. Largest cargo ever aboard, 212M feet lumber, Grand Marias to Tonawanda. In first-class order, rat s B. new main and fore sails last fall, needs no repairs. Vessel now lying at New Baltimore, Michigan. For further particulars, address GILBERT HATHEWAY, Agent,
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I OWN A STEAMBARGE, and want to buy one or two barges or schooners to tow, that will carry from 500 to 550 M feet of lumber. Any person having any such boats, who will sell them at a reasonable price and on long time Address
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Eastward.	Arrive	Depart.
No 4, Fast Limited Express	*2 55 A M	*2 55 A M
No 8, N. Y. B & A Express	*8 30 A M	*8 55 A M
No 26, Elyria Accommodation	†7 45 A M	
No 24, Buffalo Ac'm via Sandusky	†10 05 A M	†10 15 A M
No 24, Toledo Accom via Norwark	†10 05 A M	†10 15 A M
No. 10, New York & Boston, "Flyer"		*11 35 A M
No 12, N Y & B Fast Express	*2 20 P M	2 45 P M
No 2, Night Ex via Norwalk	9 40 P M	†10 00 P M
No 22, Night Ex via Sandusky	†9 40 P M	
No 26, Conneaut Accommodation	†4 25 P M	

Westward.	Arrive.	Depart.
No 1, Fast Limited Express	*12 15 A M	*12 15 A M
No. 23, Cleveland Express	*2 15 A M	
No 3, Chicago Express via "	§5 30 A M	5 45 A M
No 25, Mich Accom Norwalk		†5 45 A M
No 21, Toledo Ex via Norwalk	†12 50 P M	†3 20 P M
No 5, St Louis Ex via Sandusky	*10 50 A M	*10 55 A M
No 9, Chi Pac Ex via Norwalk	•6 55 P M	*7 15 P M
No 31, Elyria ac to Elyria only		†4 30 P M
No 27, Conneaut Accommodation	†8 10 A M	

Sunday train for Nottingham—Depart 9:20 a. m. and 1:00 p. m.; returning, arrive at 9:20 a. m. and 4:45 p. m.

Reference marks—* Daily, † daily, except Sunday, § daily, except Monday.

A local Cleveland and New York sleeper, also sleeper for Boston, and dining car daily on No. 10, leaving Cleveland at 11 35 A M.; arrive Grand Central depot, New York, 7.30 a. m.

For full information as to trains and connections apply at the Union ticket office, corner Bank and Superior streets, under Mercantile Bank.

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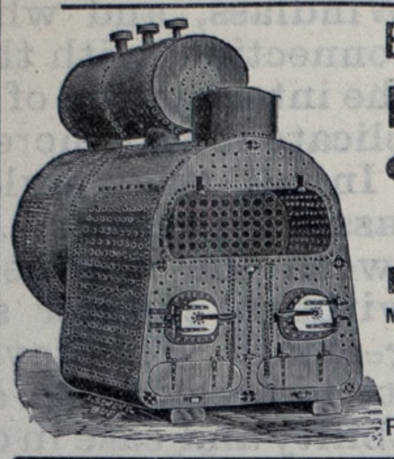

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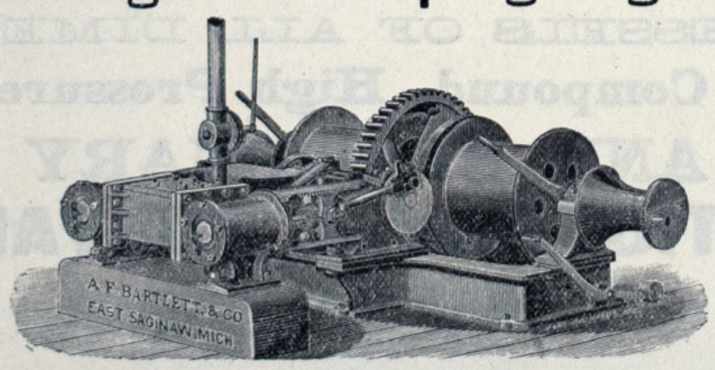

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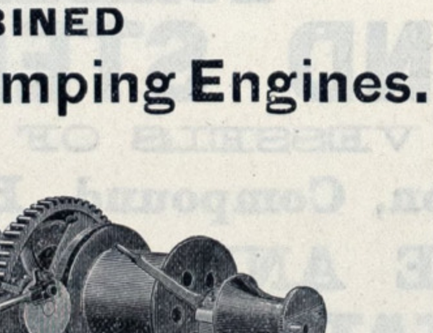

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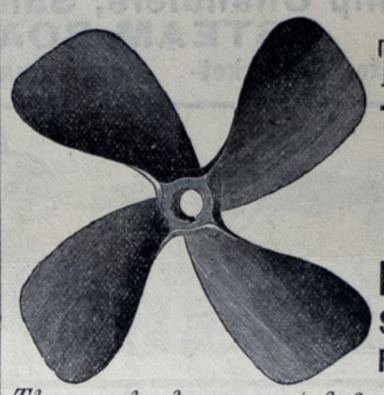

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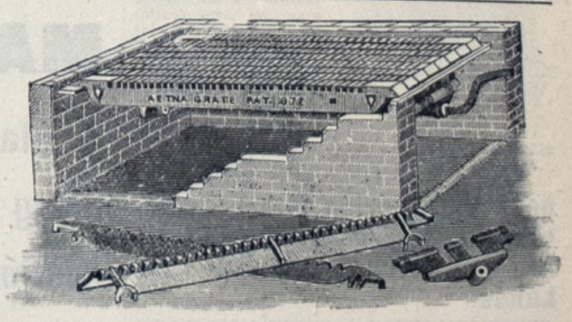

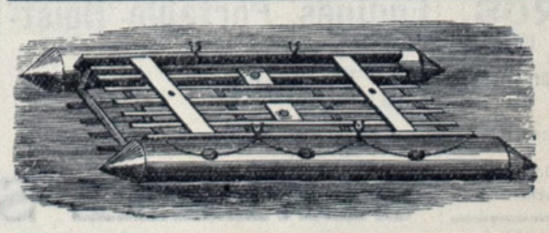

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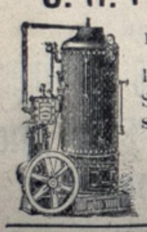

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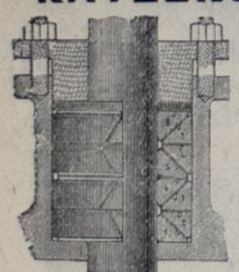

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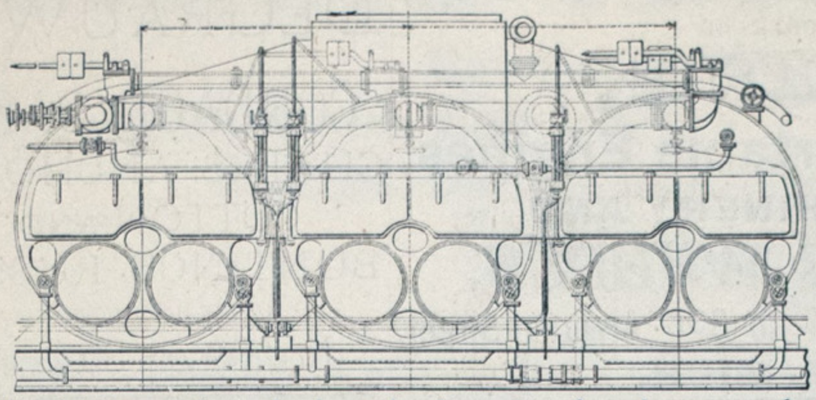

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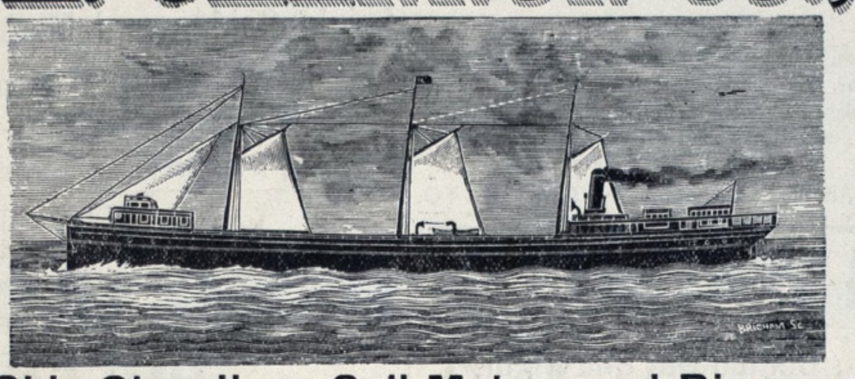

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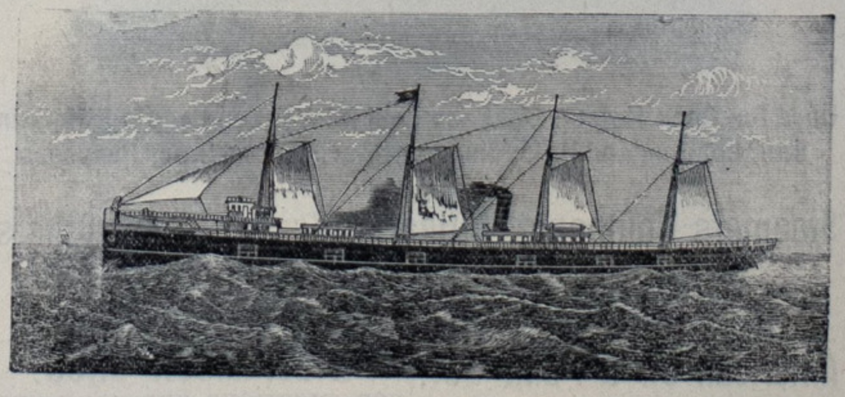

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